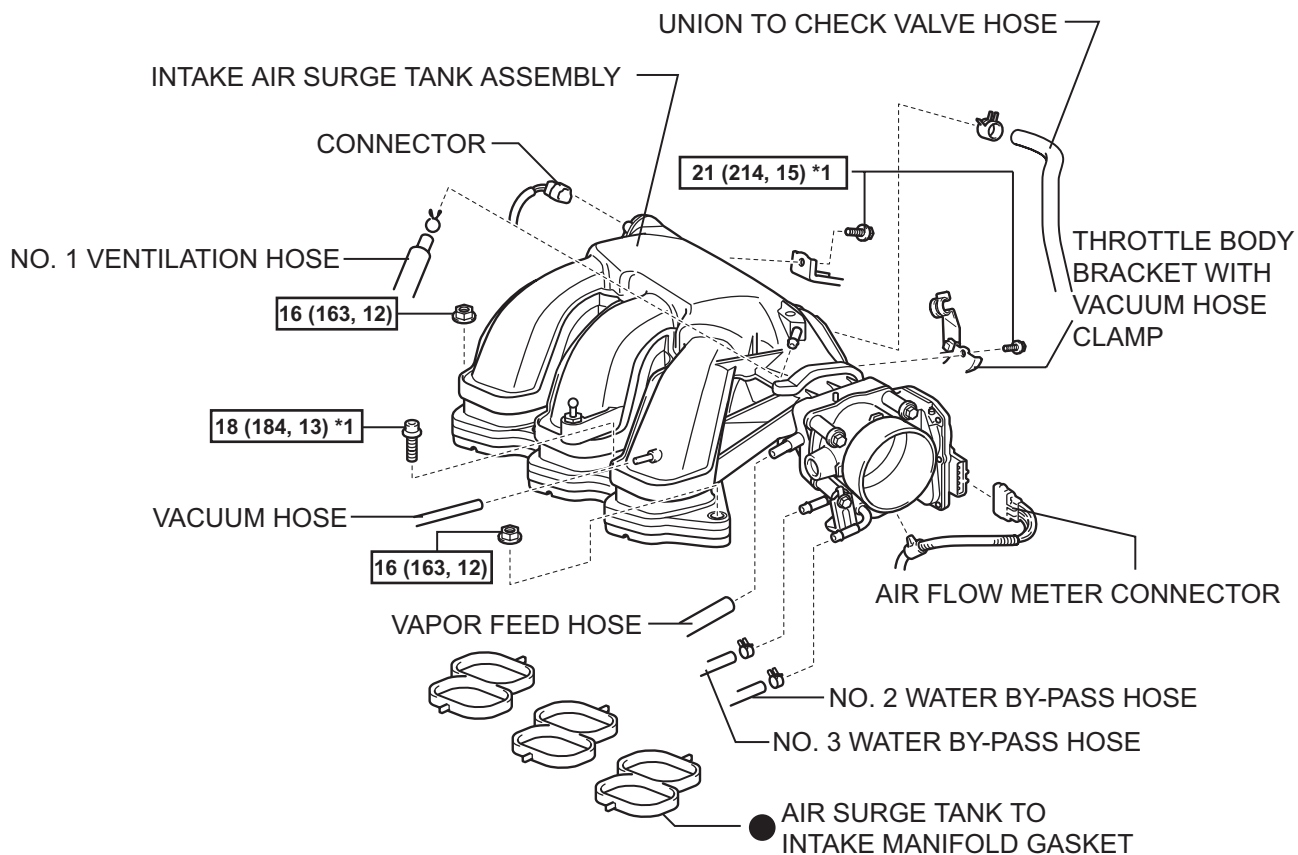


FUEL INJECTOR

COMPONENTS



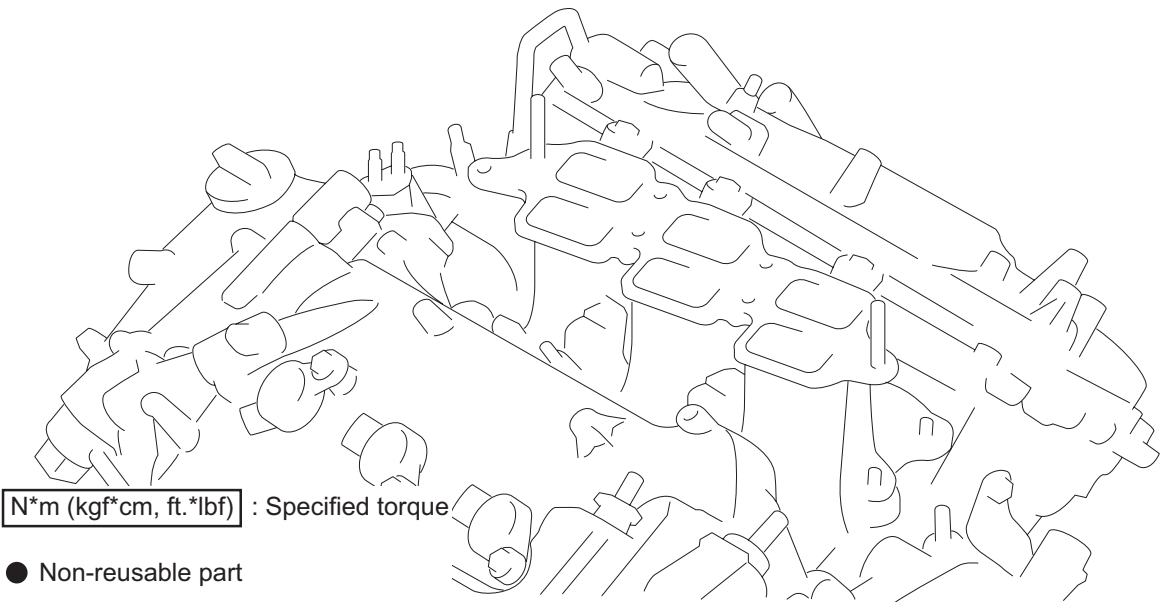
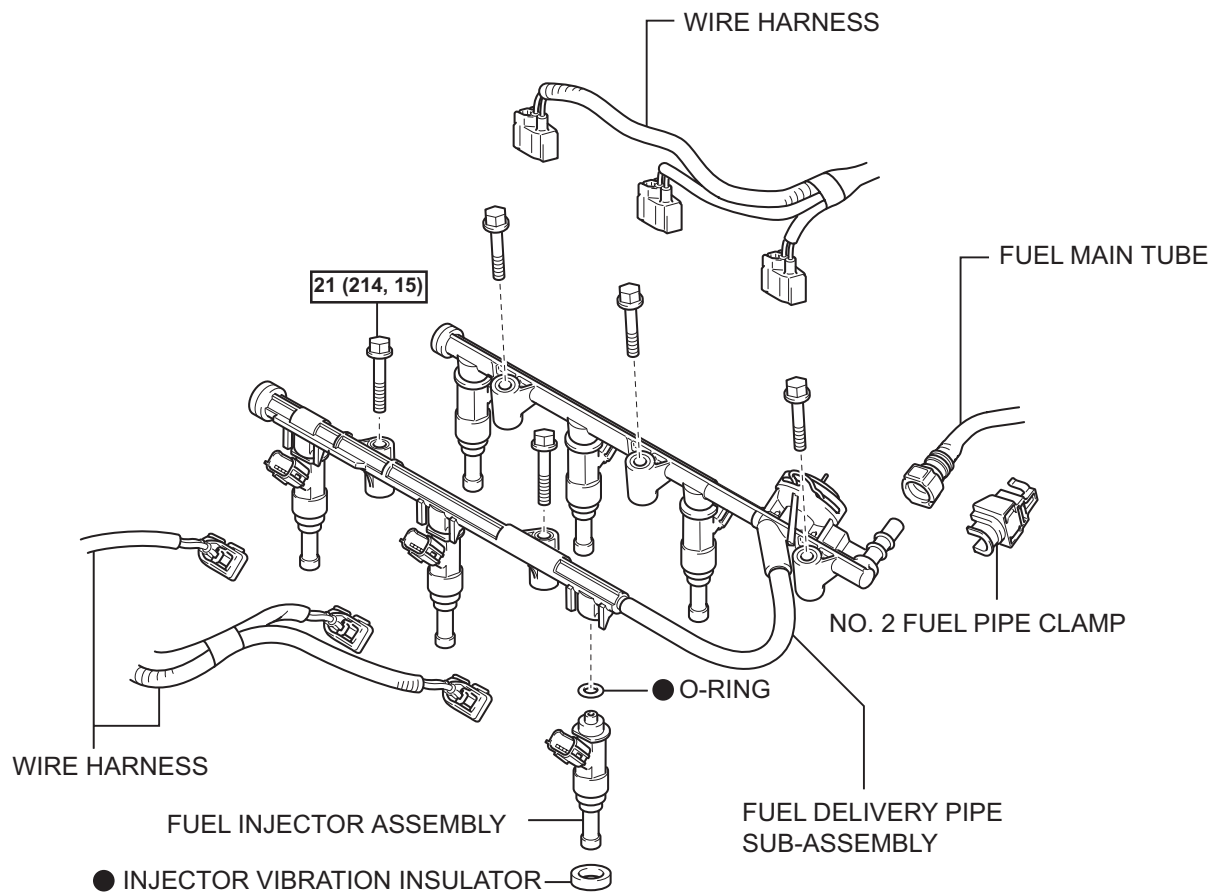
N*m (kgf*cm, ft.*lbf) : Specified torque

● Non-reusable part

*1: Do not allow oil to contact these bolts

FU

FU



N*m (kgf*cm, ft.*lbf) : Specified torque

● Non-reusable part

REMOVAL

CAUTION:

Do not allow fuel to spray when removing the pipe between the high pressure side fuel pump and the fuel injector. The fuel in the pipe is highly pressurized.

1. DISCHARGE FUEL SYSTEM PRESSURE

CAUTION:

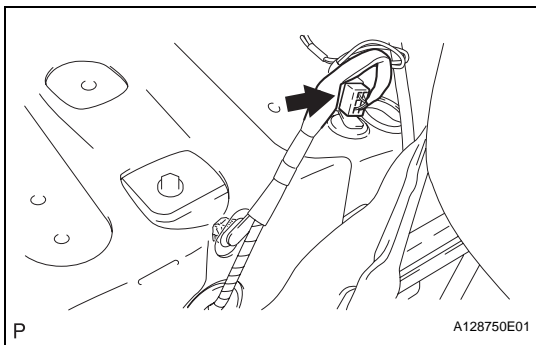
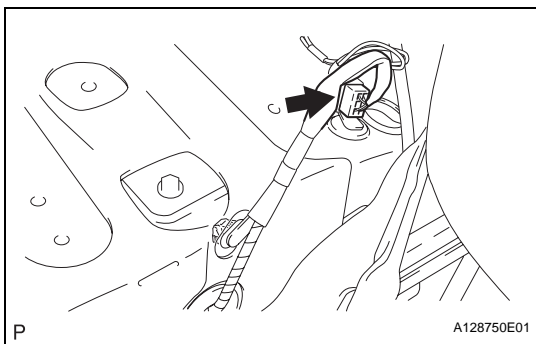
- The "DISCHARGE FUEL SYSTEM PRESSURE" procedures must be performed before disconnecting any part of the fuel system.
- After performing the "DISCHARGE FUEL SYSTEM PRESSURE" procedures, pressure will remain in the fuel line. When disconnecting the fuel line, place a cloth or equivalent over fittings to reduce the risk of fuel spray.

- Remove the console box (see page [IP-16](#)).
- Start the engine. After the engine has stopped, turn the ignition switch OFF.

HINT:

DTC P0171/P0172 (system too lean) may be set.

- Check that the engine does not start.
- Remove the fuel tank cap, and let the air out of the fuel tank.



- Connect the connector.
- Install the console box (see page [IP-23](#)).

2. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to prevent airbag and seat belt pretensioner activation.

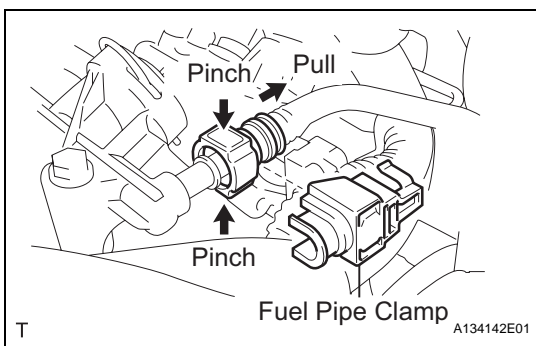
3. REMOVE ENGINE ASSEMBLY

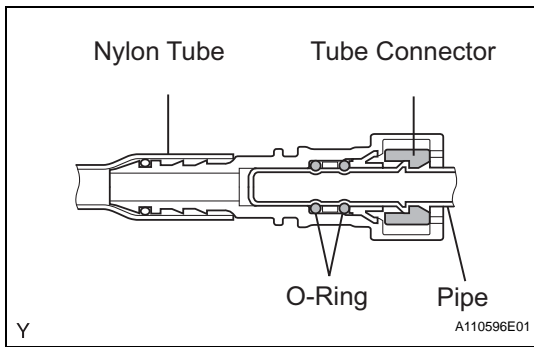
- Remove the engine (see page [EM-21](#)).

4. REMOVE INTAKE AIR SURGE TANK ASSEMBLY (See page [EM-27](#))

5. DISCONNECT FUEL MAIN TUBE

- Remove the No. 2 fuel pipe clamp.





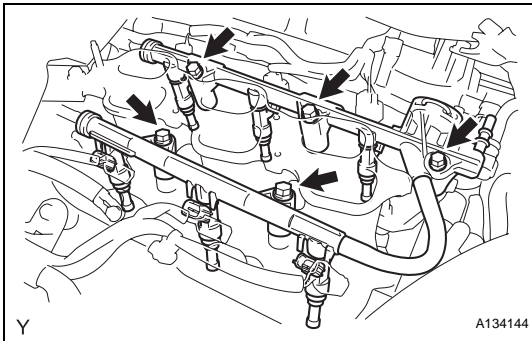
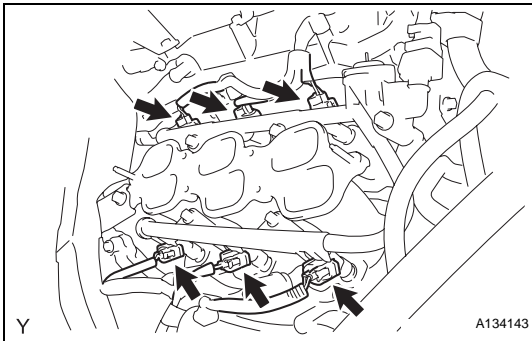
- (b) Pinch the tube connector and then pull out the fuel pipe.

NOTICE:

- Check for foreign matter in the fuel tube around the fuel tube's connector. Clean it if necessary. Foreign matter can affect the O-ring's ability to seal the connector and fuel main pipe.
- Do not use any tools to separate the connector and pipe.
- Do not forcefully bend or twist the hose.
- Keep the connector and pipe free from foreign matter.
- If the connector and pipe are stuck together, pinch the connector and turn it carefully to disconnect it.
- Put the connector in a plastic bag to prevent damage and contamination.

6. REMOVE FUEL INJECTOR ASSEMBLY

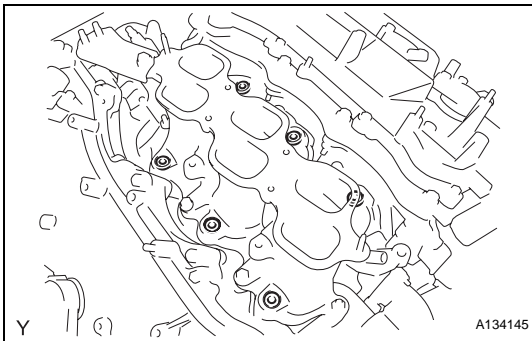
- (a) Disconnect the 6 injector connectors.



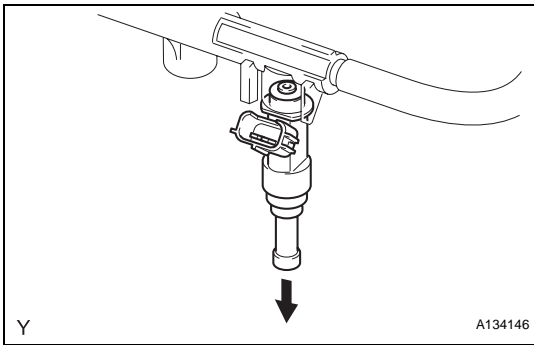
- (b) Remove the 5 bolts and fuel delivery pipe together with the 6 injectors.

NOTICE:

Be careful not to drop the fuel injectors when removing the fuel delivery pipe.



- (c) Remove the 6 insulators from the intake manifold.



- (d) Pull out the 6 fuel injectors from the fuel delivery pipe.
- (e) Remove the O-ring from each fuel injector.

INSPECTION

1. INSPECT FUEL INJECTOR ASSEMBLY

- (a) Inspect injector resistance.
 - (1) Measure the resistance between the terminals.

Standard resistance:

11.6 to 12.4 Ω at 20°C (68°F)

If the result is not as specified, replace the injector.

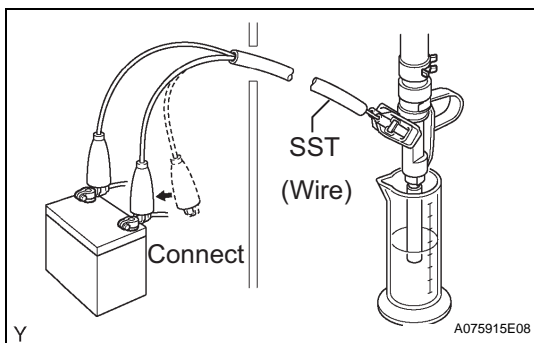
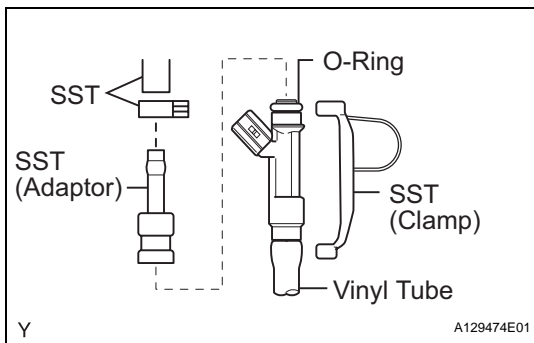
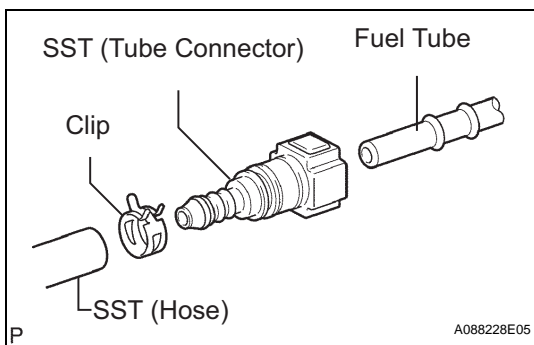
- (b) Inspect the injection volume.

CAUTION:

This test involves high-pressure fuel and electricity. Take every precaution regarding safe handling of both the fuel and the electricity. Perform this test in a safe area, and avoid any sparks or flames. Do not smoke.

- (1) Install the fuel tube connector to SST (hose), then connect the tube connector to the fuel pipe (vehicle side).

SST 09268-41048 (95336-08070, 09268-41500)



- (2) Install the O-ring to the fuel injector.
- (3) Connect SST (adaptor and hose) to the injector, and hold the injector and union with SST (clamp).

SST 09268-41048 (09268-41130, 90467-13001), 09268-41400

- (4) Put the injector into the graduated cylinder.

CAUTION:

Install a suitable vinyl tube onto the injector to contain gasoline spray.

- (5) Operate the fuel pump.
- (6) Connect SST (wire) to the injector and the battery for 15 seconds, and measure the injection volume with the graduated cylinder. Test each injector 2 or 3 times.

SST 09842-30080

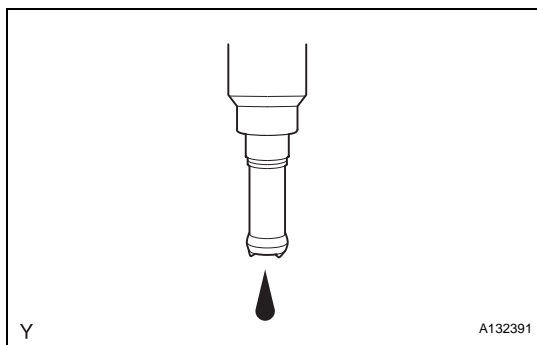
Standard volume:

84 to 100 cm³ (5.1 to 6.0 cu in.) in 15 seconds

Difference between each injector:

16 cm³ (0.96 cu in.) or less

If the injection volume is not as specified, replace the injector.

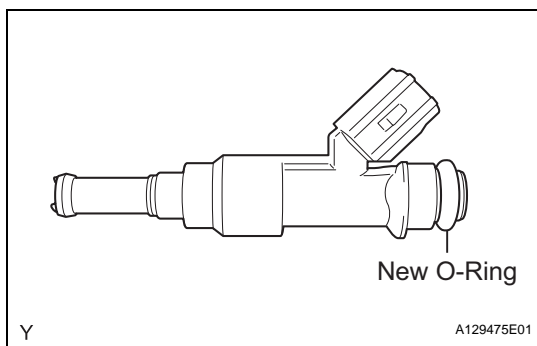


(c) Check for leakage.

- (1) In the condition above, disconnect the tester probes of SST (wire) from the battery and check for fuel leakage from the injector.

Fuel drop:

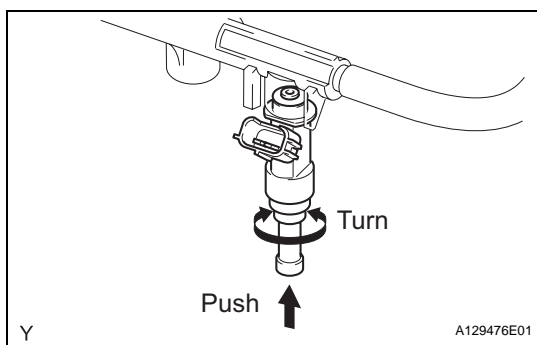
1 drop or less in 16 minutes



INSTALLATION

1. INSTALL FUEL INJECTOR ASSEMBLY

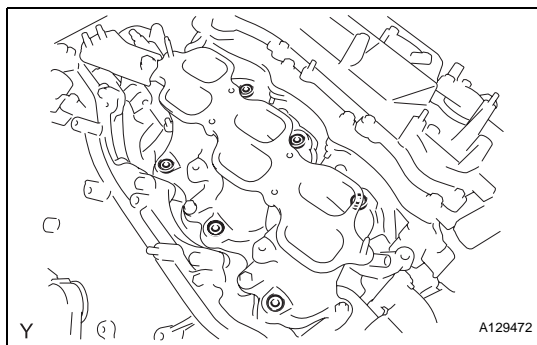
- (a) Apply a light coat of spindle oil or gasoline to 6 new O-rings, and install an O-ring to each injector.



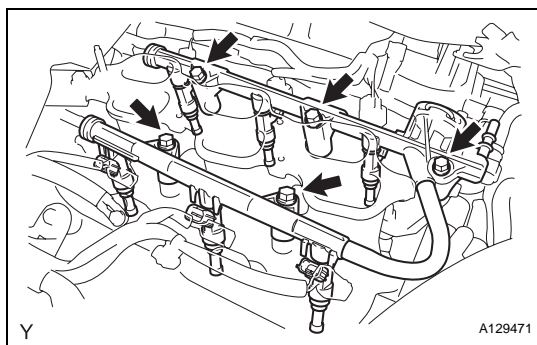
- (b) Apply a light coat of spindle oil or gasoline where the fuel delivery pipe contacts the O-ring.
- (c) Push the fuel injector while twisting it back and forth to install it in the fuel delivery pipe.
- (d) Position the fuel injector connector outward.

NOTICE:

- Be careful not to twist the O-ring.
- After installing the fuel injector, check that it turns smoothly. If it does not, reinstall it with a new O-ring.



- (e) Install 6 new insulators to the intake manifold.

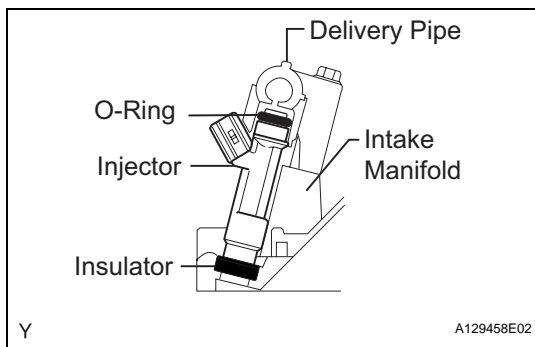


- (f) Place the fuel delivery pipe together with the 6 fuel injectors into the intake manifold.

NOTICE:

Be careful not to drop the fuel injectors when installing the fuel delivery pipe.

FU



- (g) Temporarily install the 5 bolts which are used to hold the fuel delivery pipe to the intake manifold.

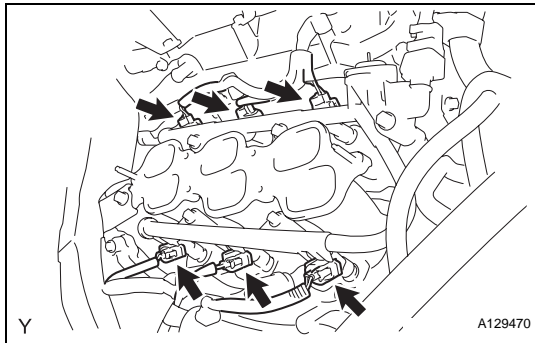
NOTICE:

After installing the fuel injector, check that it turns smoothly. If it does not, reinstall it with a new O-ring.

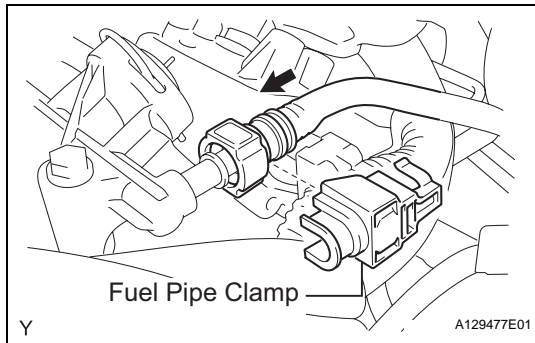
- (h) Tighten the 5 bolts which are used to hold the fuel delivery pipe to the intake manifold.

Torque: 21 N*m (214 kgf*cm, 15 ft.*lbf)

- (i) Connect the 6 fuel injector connectors.



FU



2. CONNECT FUEL MAIN TUBE

- (a) Push in the tube connector to the pipe until the tube connector makes a "click" sound.

NOTICE:

- Check that there is no damage or foreign objects on the connected part of the fuel pipe.
- After connecting, check if the fuel tube connector and the pipe are securely connected by pulling on them.

- (b) Install the No. 2 fuel pipe clamp.

3. INSTALL INTAKE AIR SURGE TANK ASSEMBLY (See page [EM-34](#))

4. INSTALL ENGINE ASSEMBLY

- (a) Install the engine (see page [EM-31](#)).

5. ADD ENGINE COOLANT (See page [CO-8](#))

6. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

7. CHECK FOR ENGINE COOLANT LEAKS (See page [CO-1](#))

8. CHECK FOR FUEL LEAKS